

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Addres: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usptb.gov

NOTICE OF ALLOWANCE AND FEE(S) DUE

7590

06/18/2003

John P White Cooper & Dunham LLP 1185 Avenue of the Americas New York, NY 10036

EXAMINER				
MCKENZIE, THOMAS C				
ARTINIT	CLASS-SUBCLASS			

514-266400

\ 1624
DATE MAILED: 06/18/2003

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO. 09/711,272 11/09/2000 Timothy Nortis 62814-A/JPW/GJG 6700

TITLE OF INVENTION: STABLE POLYMORPH ON N-(3-ETHYNYLPHENYL)-6, 7-BIS (2METHOXYETHOXY)-4-QUINAZOLINAMINE HYDROCHLORIDE, METHODS OF PRODUCTION, AND PHAMACEUTICAL USES THEREOF

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300	\$0	\$1300	09/18/2003

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED.</u> THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above

B. If the status is changed, pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above and notify the United States Patent and Trademark Office of the change in status, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check the box below and enclose the PUBLICATION FEE and 1/2 the ISSUE FEE shown above.

 Applicant claims SMALL ENTITY status. See 37 CFR 1.27.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Box ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.



PART B - FEE(S) TRANSMITTAL



Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

ill Mail Stop ISSUE FEE
Commissioner for Patents
Alexandria, Virginia 22313-1450
(703)746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 4 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

maintenance fee notification	ns.				ress; and/or (b) indicating a sep	
	CE ADDRESS (Note: Legibly ma 590 06/18/200	rk-up with any corrections or use	Block 1)	Fee(s) Transmi	ite of mailing can only be used for ttal. This certificate cannot	be used for any other
John P White	00/10/200	-		accompanying property formal drawing.	papers. Each additional paper, must have its own certificate of i	such as an assignment or mailing or transmission.
Cooper & Dunham	LLP				Certificate of Mailing or Tran	
1185 Avenue of the		-		I hereby certify	that this Fee(s) Transmittal is	being deposited with the
New York, NY 100	036			United States Po envelope addres	that this Fee(s) Transmittal is estal Service with sufficient postased to the Box Issue Fee address	ge for first class mail in ar s above, or being facsimile
				transmitted to th	e USPTO, on the date indicated b	below.
						(Depositor's name
						(Signature
						(Date
APPLICATION NO.	FILING DATE	FIF	RST NAMED INVEN	TOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,272	11/09/2000		Timothy Norris		62814-A/JPW/GJG	6700
TITLE OF INVENTION		MORPH ON N-(3-E1	•)-6, 7-BIS (2METHOXYETHOXY)-4-QUII	NAZOLINAMINE
HYDROCHLORIDE, MET	HODS OF PRODUCTION	ON, AND PHAMACEUT	ICAL USES THE	REOF		
			T numi	IGA TION EEE	TOTAL FEE(0) DVF	DATE DUE
APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBL	ICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1300		\$0	\$1300	09/18/2003
EXAMI	NER	ART UNIT	CLASS-SUBC	ASS		
MCKENZIE, 1	THOMAS C	1624	514-26640	00	•	
1. Change of corresponder	nce address or indication	of "Fee Address" (37	2 For printing	on the patent from	at nage list (1)	
CFR 1.363).	ice address of marcanon	or recrudess (57	the names of u	p to 3 registered p	patent attorneys	
☐ Change of corresponde Address form PTO/SB/1:	ence address (or Change 22) attached.	of Correspondence	single firm (ha	alternatively, (2)	er a registered	
PTO/SB/47; Rev 03-02	on (or "Fee Address" Indoor more recent) attached.		registered pater	ent) and the name thattorneys or age ne will be printed.		· .
Number is required.				•		
3. ASSIGNEE NAME AND			-	• • •		
PLEASE NOTE: Unless a been previously submitted	in assignee is identified to the USPTO or is being	pelow, no assignee data v g submitted under separa	will appear on the p te cover. Completion	oatent. Inclusion of on of this form is N	f assignee data is only appropria OT a substitute for filing an assi	te when an assignment has gnment.
(A) NAME OF ASSIGNE			ESIDENCE: (CIT			
Please check the appropriate	assignee category or cat	egories (will not be print	ed on the patent)	individual	☐ corporation or other private g	roup entity 🚨 governmen
la. The following fee(s) are	enclosed:	4b. Pa	ayment of Fee(s):			
☐ Issue Fee		QAc	check in the amoun	t of the fee(s) is en	closed.	
☐ Publication Fee		•	ment by credit car			
☐ Advance Order - # of C	opies	☐ The Depo:	e Commissioner is sit Account Numbe	hereby authorized a	by charge the required fee(s), or conclude the concluse an extra copy of this	credit any overpayment, to form).
Commissioner for Patents is	requested to apply the Is	sue Fee and Publication	Fee (if any) or to re	-apply any previo	usly paid issue fee to the applicat	ion identified above.
Authorized Signature)		(Date)				
. radiorizou digitaturoj		(Date)				
NOTE; The Issue Fee and	d Publication Fee (if rec	uired) will not be accer	nted from anyone			
other than the applicant; interest as shown by the re	a registered attorney or cords of the United State	agent; or the assignee s Patent and Trademark (or other party in Office.			

TRANSMIT THIS FORM WITH FEE(S)

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Alexandria, Virginia 22313-1450.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



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	APPLICATION NO.	FIL	ING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/711,272 11/09/2000		1/09/2000	Timothy Norris	62814-A/JPW/GJG	6700	
	7	590	06/18/2003		EXAMIN	ER
John P White				MCKENZIE, THOMAS C		
	Cooper & Dunham 1185 Avenue of th		cas -		ART UNIT	PAPER NUMBER
	New York, NY 10036				1624	
					DATE MAILED: 06/18/2003	

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b) (application filed on or after May 29, 2000)

The patent term adjustment to date is 0 days. If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the term adjustment will be 0 days.

If a continued prosecution application (CPA) was filed in the above-identified application, the filing date that determines patent term adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) system. (http://pair.uspto.gov)

Any questions regarding the patent term extension or adjustment determination should be directed to the Office of Patent Legal Administration at (703)305-1383.



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
09/711,272	11/09/2000	Timothy Norris	62814-A/JPW/GJG	6700	
7590 06/18/2003 John P White			EXAMIN	EXAMINER	
			MCKENZIE, THOMAS C		
Cooper & Dunham		ſ	ART UNIT	PAPER NUMBER	
New York, NY 10036 UNITED STATES		•	1624		
		I	DATE MAILED: 06/18/2003		

Notice of Fee Increase on January 1, 2003

If a reply to a "Notice of Allowance and Fee(s) Due" is filed in the Office on or after January 1, 2003, then the amount due will be higher than that set forth in the "Notice of Allowance and Fee(s) Due" since there will be an increase in fees effective on January 1, 2003. See Revision of Patent and Trademark Fees for Fiscal Year 2003; Final Rule, 67 Fed. Reg. 70847, 70849 (November 27, 2002).

The current fee schedule is accessible from: http://www.uspto.gov/main/howtofees.htm.

If the issue fee paid is the amount shown on the "Notice of Allowance and Fee(s) Due," but not the correct amount in view of the fee increase, a "Notice to Pay Balance of Issue Fee" will be mailed to applicant. In order to avoid processing delays associated with mailing of a "Notice to Pay Balance of Issue Fee," if the response to the Notice of Allowance and Fee(s) due form is to be filed on or after January 1, 2003 (or mailed with a certificate of mailing on or after January 1, 2003), the issue fee paid should be the fee that is required at the time the fee is paid. If the issue fee was previously paid, and the response to the "Notice of Allowance and Fee(s) Due" includes a request to apply a previously-paid issue fee to the issue fee now due, then the difference between the issue fee amount at the time the response is filed and the previously paid issue fee should be paid. See Manual of Patent Examining Procedure, Section 1308.01 (Eighth Edition, August 2001).

Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

		r		
	Application No.	Applicant(s)		
	09/711,272	NORRIS ET AL.		
Notice of Allowability	Examiner	Art Unit		
	Thomas McKenzie Ph.D.	1624		
The MAILING DATE of this communication apper All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RI of the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in this app or other appropriate communication GHTS. This application is subject to	olication. If not included will be mailed in due course. THIS		
1. This communication is responsive to amendments of 5/28/	<u>03</u> .			
2. The allowed claim(s) is/are 1-7,14-32,50,52-54 and 58-91.				
3. The drawings filed on are accepted by the Examine	r.			
 4. ☐ Acknowledgment is made of a claim for foreign priority und a) ☐ All b) ☐ Some* c) ☐ None of the: 	ler 35 U.S.C. § 119(a)-(d) or (f).			
1. Certified copies of the priority documents have	been received.			
2. Certified copies of the priority documents have	been received in Application No	·		
 Copies of the certified copies of the priority documents. International Bureau (PCT Rule 17.2(a)). 	cuments have been received in this	national stage application from the		
* Certified copies not received:				
5. Acknowledgment is made of a claim for domestic priority ur		onal application).		
(a) ☐ The translation of the foreign language provisional a6. ☐ Acknowledgment is made of a claim for domestic priority ur				
6. Acknowledgment is made of a claim for domestic priority of	idel 35 0.5.0. 99 120 alid/ol 121.			
Applicant has THREE MONTHS FROM THE "MAILING DATE" of below. Failure to timely comply will result in ABANDONMENT of the second o	this communication to file a reply co	omplying with the requirements noted NTH PERIOD IS NOT EXTENDABLE		
7. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which gives reas				
8. CORRECTED DRAWINGS must be submitted.				
(a) ⊠ including changes required by the Notice of Draftspers	son's Patent Drawing Review (PTO-	-948) attached		
1) ☐ hereto or 2) ⊠ to Paper No. <u>6</u> .	•	•		
(b) ☐ including changes required by the proposed drawing correction filed, which has been approved by the Examiner.				
(c) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No				
(,		,		
Identifying indicia such as the application number (see 37 CFR 1. of each sheet. The drawings should be filed as a separate paper	84(c)) should be written on the drawir with a transmittal letter addressed to	ngs in the top margin (not the back) the Official Draftsperson.		
9. DEPOSIT OF and/or INFORMATION about the deposit attached Examiner's comment regarding REQUIREMENT FOR TI				
Attachment(s)				
1☐ Notice of References Cited (PTO-892)	2☐ Notice of Informa	al Patent Application (PTO-152)		
3☐ Notice of Draftperson's Patent Drawing Review (PTO-948)	4☐ Interview Summa	ary (PTO-413), Paper No		
5⊠ Information Disclosure Statements (PTO-1449), Paper No. 14				
7 Examiner's Comment Regarding Requirement for Deposit	8⊠ Examiner's State 9□ Other .	ement of Reasons for Allowance		
of Biological Material	a Cuiei .			

Application/Control Number: 09/711,272

Art Unit: 1624

Statement of Reasons for Allowance

Claims 1-7, 14-32, 50, 52-54, and 58-91 are allowed. The following is an 1. Examiner's statement of reasons for allowance: Applicants cancellation of claims 55-57, made in amendment C, renders moot the objection made in point #6 of the final rejection. Applicants' deletion of "prophylaxis" from claim 50 overcomes the enablement rejection made in point #10. Applicants' amendment to claim 63, specification they intent to treat tumors overcomes the indefiniteness rejection made in point #11. Applicants' amendments to claims 1, 3, and 5, specifying that the claimed compounds and compositions are of polymorph B only overcomes the art rejections made over Schnur ('498) in points #13-#16. Applicants state in lines 15-19, page 16 that the material of Schnur ('498) is a mixture of polymorphs A and B. Purer materials necessarily differ from impure materials. The motivation to prepare purer material for human use is obvious. However, preparing crystalline modifications and polymorphs is an unpredictable art. There is no objective evidence establishing that any method was known to those skilled in process chemistry field whereby the claimed pure polymorph might have been synthesized. Claim 64 is drawn to treatment of specific cancers by any polymorph of the claimed compounds. These specific cancers are not found in Schnur ('498).

Applicants claim 2 has X-ray data that differs in fine detail from that given in claim 1. Thus the limitations are not identical. The limitation in claim 3, "free

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of the A polymorph" does not exist in claim 1, Thus the claims are not identical and the objection made in point #4 of the Final rejection is withdrawn. For the same reason the objection made in point #5 is withdrawn. Claim 58 contains the limitation "a therapeutically effective amount". This limitation is not present in claim 5 and the objection made in point #7 is withdrawn. Upon further consideration, Applicants' argument that a compound can be substantially free of the A polymorph without being substantially homogeneous is persuasive. Thus, the objection made in point #8 is withdrawn. Applicants' amendment to claim 14, restricting treatment to the enabled cancers, overcomes the rejection made in point Applicants' amendment to claim 63, restricting treatment to the enabled #9. cancers, overcomes the rejection made in point #12. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

2. Please direct any inquiry concerning the status of this application or of the location of any papers to the Customer Service Office, whose telephone number is (703) 308-0197. The FAX number for the Customer Service Office is (703) 308-

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4407. All Post-Allowance correspondence concerning this application must be mailed to the following address:

Box Issue Fee Commissioner for Patents Washington, DC 20231.

Such correspondence (amendments under 37 CFR 1.312, IDS statements, formal drawings etc) also may be faxed to the Office of Patent Publications at (703) 308-5083. Sending Post-Allowance papers to Technology Center 1600 will only cause delays in matching papers with the case.

purkund J-12h

Mukund Shah Supervisory Patent Examiner Art Unit 1624

TCMcK June 9, 2003